66. (New) An improved semiconductor transistor device having a transistor gate and a film located adjacent said transistor gate and having a concentration of deuterium within said film, wherein the improvement comprises:

a concentration of at least about 10^{16} cm^{-3} of said deuterium being present in said film, said transistor device susceptible to degradation associated with hot carrier stress, said concentration of deuterium substantially reducing said degradation associated with said hot carrier stress.

67. (New) The device as recited in claim 66 wherein said film is selected from the group consisting of:

a dielectric film, and a polysilicon film.

68. (New) The device as recited in claim 67 wherein said dielectric film is comprised of a material selected from the group consisting of silicon dioxide, silicon nitride, or silicon oxynitride, each of which includes a substantial concentration of a hydrogen isotope.

69. (New) The device as recited in claim 68 wherein said polysilicon film is comprised of polycrystalline silicon.

70. (New) The device as recited in claim 66 wherein said film is a field oxide, a gate oxide or a dielectric.

71. (New) The device as recited in claim 70 wherein said transistor is a complementary metal oxide semiconductor.

72. (New) The device as recited in claim 66 wherein said substrate is comprised of a material selected from the group consisting of:

silicon, germanium, and gallium arsenide.

73. (New) The device as recited in claim 66 wherein said substrate contains at least one doped region.

74. (New) The device as recited in claim 66 further comprising a gate oxide, a field oxide or a spacer, each of which contains a substantial concentration of deuterium.

75. (New) An improved semiconductor transistor device having a transistor gate and a film located adjacent said transistor gate, structurally characterized by a concentration of deuterium in said film at said interface resulting from post-fabrication heating of said transistor device in an atmosphere comprising about 10% deuterium and 90% nitrogen at a temperature of about 400°C for about 1 hour, said transistor device being susceptible to degradation associated with hot carrier stress, said concentration of deuterium substantially reducing said degradation associated with said hot carrier stress.

76. (New) A semiconductor device comprising a field effect transistor having a gate dielectric film disposed between a transistor gate contact and a semiconductive layer that includes doped source and drain regions and contacts to said doped source and drain regions, said semiconductor device structurally characterized by a concentration of deuterium in said gate dielectric film at an interface with said semiconductive layer provided by heating the device, after formation of said source, drain and gate contacts, at a temperature of about 400°C for about one hour in an atmosphere comprising about 10% deuterium and about 90% nitrogen, said transistor device susceptible to